

## CLAIMS

What is claimed is:

1 1. A method of generating a knowledge neighborhood comprising:  
2 selecting a set of knowledge profiles associated with a root concept;  
3 determining a knowledge neighbor for the root concept, the knowledge neighbor  
4 being a concept common to the selected knowledge profiles; and  
5 deriving an affinity for the knowledge neighbor to represent a relationship between  
6 the root concept and the knowledge neighbor.

1 2. The method of claim 1 further comprising:  
2 using the knowledge neighbor as a new root concept to determine an additional  
3 knowledge neighbor.

1 3. The method of claim 1, wherein determining a knowledge neighbor comprises:  
2 filtering all concepts common to the selected knowledge profiles against a pre-  
3 determined confidence level threshold.

1 4. The method of claim 1, wherein selecting the set of knowledge profiles comprises:  
2 filtering all knowledge profiles associated with the root concept against a pre-  
3 determined confidence level threshold.

1 5. The method of claim 1 further comprising:  
2 obtaining an identity for the root concept.

1 6. The method of claim 1, wherein obtaining the identity for the root concept  
2 comprises:  
3 receiving a user selection of the root concept.

1 7. The method of claim 1, wherein the root concept is selected from the group  
2 consisting of a knowledge term, a profile, a search criteria, and a document.

1 8. The method of claim 1 further comprising:  
2 creating a knowledge map to graphically illustrate the root concept, the knowledge  
3 neighbor, and the affinity.

1 9. The method of claim 8 further comprising:  
2 using the knowledge map to designate the knowledge neighbor as a new root  
3 concept to determine an additional knowledge neighbor.

1 10. The method of claim 8 further comprising:  
2 overlaying the knowledge map on an earlier generated knowledge map.

1 11. The method of claim 8 further comprising:  
2 graphically illustrating more than one knowledge neighbor as a single knowledge  
3 neighbor.

1 12. The method of claim 8, wherein creating the knowledge map comprises:  
2 graphically illustrating the knowledge neighbor if it satisfies an affinity threshold.

1 13. The method of claim 8, wherein the knowledge map is a directed graph  
2 comprising:  
3 a node representing the root concept;  
4 a node representing the knowledge neighbor; and  
5 an edge representing the affinity, the edge graphically linking the node representing  
6 the root concept and the node representing the knowledge neighbor.

1 14. The method of claim 13, wherein the edge is illustrated with a length proportional  
2 to the affinity.

1 15. The method of claim 13, wherein the edge is illustrated with a color assigned to the  
2 affinity.

1 16. The method of claim 1, wherein deriving the affinity comprises:  
2 counting the knowledge profiles associated with the knowledge neighbor; and

calculating the affinity using the count of the knowledge profiles.

17. The method of claim 16, wherein calculating the affinity comprises:  
factoring in a confidence level for the knowledge neighbor in each of the counted  
knowledge profiles.

18. The method of claim 1, wherein deriving the affinity comprises using a formula

$$\sum_{P=1}^N L(R)_P * L(C)_P$$

to calculate the affinity, wherein N is a count of the knowledge profiles associated with the  
knowledge neighbor, R is the root concept, C is the knowledge neighbor, L(R) is a  
confidence level for the root concept in a profile P, and L(C) is the confidence level of the  
knowledge neighbor in the profile P.

19. A computer-readable medium having computer-executable instructions  
comprising:  
selecting a set of knowledge profiles associated with a root concept;  
determining a knowledge neighbor for the root concept, the knowledge neighbor  
being a concept common to the selected knowledge profiles; and  
deriving an affinity for the knowledge neighbor to represent a relationship between  
the root concept and the knowledge neighbor.

20. The computer-readable medium of claim 19 having further instructions  
comprising:  
using the knowledge neighbor as a new root concept to determine an additional  
knowledge neighbor.

21. The computer-readable medium of claim 19 having further instructions  
comprising:  
obtaining an identity for the root concept.

1 22. The computer-readable medium of claim 19 having further instructions  
2 comprising:  
3 creating a knowledge map to graphically illustrate the root concept, the knowledge  
4 neighbor, and the affinity.

1 23. The computer-readable medium of claim 22 having further instructions  
2 comprising:  
3 using the knowledge map to designate the knowledge neighbor as a new root  
4 concept to determine an additional knowledge neighbor.

1 24. The computer-readable medium of claim 22 having further instructions  
2 comprising:  
3 overlaying the knowledge map on an earlier generated knowledge map for the root  
4 concept.

1 25. The computer-readable medium of claim 22 having further instructions  
2 comprising:  
3 graphically illustrating more than one knowledge neighbor as a single knowledge  
4 neighbor.

1 26. A computer system comprising:  
2 a processing unit;  
3 a memory coupled to the processing unit through a bus;  
4 a computer-readable medium coupled to the processing unit through the bus; and  
5 a knowledge neighborhood generation process executed from the computer-  
6 readable medium to cause the processing unit to select a set of knowledge profiles  
7 associated with a root concept, determine a knowledge neighbor for the root concept from  
8 the selected knowledge profiles, and derive an affinity for the knowledge neighbor.

1 27. The computer system of claim 26, wherein the knowledge neighborhood generation  
2 process further causes the processing unit to use the knowledge neighbor as a new root  
3 concept to determine an additional knowledge neighbor.

- 1 28. The computer system of claim 26, wherein the knowledge neighborhood generation  
2 process further causes the processing unit to obtain an identity for the root concept.
- 1 29. The computer system of claim 26 further comprising:  
2 a knowledge mapping process executed from the computer-readable medium to  
3 cause the processing unit to graphically illustrate the knowledge neighbor and the affinity  
4 as a knowledge neighborhood for the root concept.
- 1 30. The computer system of claim 29, wherein the knowledge mapping process further  
2 causes the processing unit to graphically overlay the knowledge neighborhood on an  
3 earlier generated knowledge neighborhood for the root concept.

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